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Research Report 1513

Toward Meaningful Measures of Personnel Turbulence

Lawrence R. Boice and Thomas O. Jacobs
U.S. Army Research Institute

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Research Report 1513

Toward Meaningful Measures of Personnel Turbulence

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FOREWORD

The research described in this report was conducted by the Executive Development Research Group operating under an LOI from DCSPER, DA (17 June 1985). It is a part of Research Task 4.5.5, "Leader Doctrine Development." This task, which is a part of ARI's leadership and organizational performance research, focuses on a broad range of issues that impact the effectiveness with which Army organizations perform and develop effective leaders. A central thesis in this research is that organizational policies and practices, especially those established at divisional or higher levels, have a major influence on the operational culture and command climate experienced by small unit leaders. Thus organization policies and practices indirectly determine how well leaders develop and how well they lead.

This report grew out of efforts to identify factors that might exercise this kind of systemic influence. Findings from previous wars and the wisdom of the senior leadership of the Army suggest that personnel turbulence within units is a significant obstacle to the development of effective units. Increasingly, ARI research confirms these findings. There have been significant efforts at Department of Army level to reduce turbulence--the COHORT program is one. This report summarizes the substantial literature on personnel turbulence, provides evidence that these efforts have not sufficiently reduced turbulence, and offers an approach to reduce turbulence through policy change.

This report is based on a February 1987 briefing to Lieutenant General Robert M. Elton, then DCSPER, DA. Selected portions of this report have also been briefed to ADCSPER, DA (April 1987), CG 6th Infantry Division (L) (June 1987), and J-1 FORSCOM (March 1988), among others. The report concludes that stability measurements should be instituted as part of the Unit Status Report (USR) and recommends a strawman set of measures for that purpose. As requested by the sponsor, a copy of the report will be furnished to the Directorate, Manpower and Personnel Management, DCSPER, for possible implementation.



EDGAR M. JOHNSON
Technical Director

ACKNOWLEDGMENTS

The authors wish to acknowledge the efforts of numerous others who contributed to the development of this report. COL Darryl Henderson reviewed the materials and provided guidance on both policy issues and enlisted personnel management practices. Dr. David Marlowe was an integral part of the team effort, particularly with regard to policy impact on replacement assimilation. LTC William Knowlton provided invaluable perspective in review of early draft materials. Ms. Donna Angle provided editorial assistance in preparing for final publication, as did Mrs. Kathleen Evans.

The authors also wish to thank Robert M. Elton, Lieutenant General (USA Retired), for initiating and supporting the overall effort (Leadership for the Nineties) reported in part here. His vision and understanding of the crucial impact of military personnel management policy on the Army's ability to build and sustain combat ready forces were key factors in determining the objectives this report was designed to achieve.



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TOWARD MEANINGFUL MEASURES OF PERSONNEL TURBULENCE (TOTAL ARMY
COHESION ENHANCEMENT: SELECTED POLICY RECOMMENDATIONS)

EXECUTIVE SUMMARY

Requirement:

Research findings show that military cohesion is strongly related to the coherence and continued effective performance of units under intense combat stress. In addition, it appears that small unit stability and leader-led stability may contribute to small unit effectiveness independent of cohesion, as a result of the development of teamwork skills--skills for working together to accomplish tasks that require interdependence. The purpose of this research is to assess the effectiveness of chain-of-command training and the institution of policies at division level that will promote unit and leader-led stability. This report is an initial product of that research. It provides a summary of past and present work on turbulence and recommendations for change in the Unit Status Report. These changes should enhance stability and thus enhance both teamwork and military cohesion.

Procedure:

Previous findings on turbulence were reviewed. In addition, data collected during the course of other research projects were analyzed where possible to quantify turbulence. Data from current study of a COHORT battalion were also analyzed to obtain an estimate of current turbulence. Based on historical data and current estimates, recommendations were developed for possible changes in the Unit Status Report.

Findings:

Turbulence is defined in this report as movement of personnel into and out of units. For convenience, the term "turn-over" has been applied to personnel movements necessitated by Department of Army requirements; "internal turbulence" has been applied to personnel movements initiated by the local command for local reasons. Both kinds of movement require that a replacement be assimilated; both are obstacles to the maintenance of the teamwork and cohesion required for a high level of combat readiness and/or performance. The COHORT program was designed to reduce these obstacles, recognizing that their elimination is probably not entirely possible.

HQDA-directed moves account for less than half of all such position changes. The remainder are generated at the MACOM, division, installation, or lower level, as commanders seek to cope with the externally generated moves or accomplish other local objectives. Actual individual turbulence is estimated to be between two and three times the battalion (reported) turnover rate. In other words, for every soldier who departs the battalion, two to three soldiers experience a job change (internal turbulence). The primary Army-wide cause for job changes of personnel is to fill another vacancy caused by movement of another soldier.

The magnitude of the impact on squads, crews, and teams is very substantial. Small unit integrity, if defined as the entire squad, crew, or team remaining together without any movements at all, is measured in weeks, not months. In research on one mechanized division, the median time without any movements was 4 weeks. In a somewhat earlier effort, it was found that 87% of 54 tank crews experienced at least one instance of turbulence in a 9-week period.

Findings from current data are similar in order of magnitude. Re-analysis of data collected in 1986 shows turbulence from all sources, for FORSCOM soldiers in grades E-1 through E-4, to be around 23% (time in unit) and 28% (time in job) for a 6-month period. COHORT has made an obvious impact; the comparable figures for COHORT units alone were 14% and 20%. However, this is still substantial turbulence for soldiers at these grade levels. Worse, the comparable figures for COHORT alone for 12 months were 58% and 69%. Further, at the end of the 12-month period, only 19% of these COHORT soldiers reported having the same leader as at the start of that period. Given that unit effectiveness depends to a major extent on mutual trust and respect between leader and led, turbulence clearly is a massive problem for development of combat readiness.

Utilization of Findings:

The monthly Unit Status Report (USR) does not account for transfers within the reporting unit (internal turbulence). Further, the manner in which the USR is computed makes it in the commander's best interests to cross-level between battalions. That, in turn, probably leads to the conventional wisdom that cross-leveling is a "good thing" at any level. Thus, the current USR probably promotes instability at small unit level.

The present report advances the thesis that measures such as the USR will predispose commanders toward actions and decisions that either directly or indirectly improve the measure. (If C-2 status can be achieved through cross-leveling, then cross-leveling will be done. The question of whether it is "good" to cross-level is preempted by the USR measure.) The nature of what is measured therefore is quite important. Measures in general,

and the USSR in particular, should measure those things that contribute to combat readiness. Since stability arguably does just that, it appears desirable to measure stability, preferably in the USSR. .

The present report concludes that stability measurement should be instituted as a part of the USSR and recommends a straw-man set of measures for that purpose.

TOWARD MEANINGFUL MEASURES OF PERSONNEL TURBULENCE (TOTAL ARMY
COHESION ENHANCEMENT: SELECTED POLICY RECOMMENDATIONS)

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TOWARD MEANINGFUL MEASURES OF PERSONNEL TURBULENCE (TOTAL
ARMY COHESION ENHANCEMENT: SELECTED POLICY RECOMMENDATIONS)

INTRODUCTION

The purpose of this paper is to bring together and integrate a set of findings about how the enlisted personnel management system of the Army impacts on Army culture and operational readiness. Historically, combat effectiveness has hinged on the cohesion and commitment of the small units which constitute a larger command. This was found to be so both in the extensive research conducted during World War II and in more recent research with elements of the Israeli Defense Forces (IDF). The development of high levels of cohesion and commitment thus must be a high priority goal given current conditions of threat which may require large-scale military action on short notice.

The Army has for the past seven or eight years been intensively engaged in efforts to improve small unit cohesion. These efforts have been focused largely on creating the conditions at small unit level which will permit high levels of cohesion to develop. The initial Cohesive Unit Program (CUP) and the current COHORT program are examples of major efforts designed to enhance small unit member stability. That they clearly were properly intentioned is made clear by more recent work which has shown that stability of unit leaders and members, which is essential for cohesion development, apparently has its own independent relationship with unit performance as measured in exercises at NTC (Holz, 1988). Though the research does not yet permit the conclusion that stability alone is enough to produce improved unit performance, it seems clear that stability is demonstrably essential.

However, as this report will show, efforts to achieve unit member and leader-follower stability through such efforts as CUP and COHORT have been remarkably unsuccessful. During the seven year period of CUP and COHORT experimentation, internal turbulence (duty position changes within battalions) has been relatively constant across time, and with little difference between COHORT and non-COHORT units where it has been possible to make such comparisons. In other words, stabilization efforts to date seem to have had little impact in the real world -- at the level of the combat arms squad, crew, and team. As the review in this report will show, centrally managed personnel movements serve as "triggers" to a musical chairs phenomenon within battalions that substantially magnifies the destabilizing effects of the individual replacement system.

At least two reasons can be inferred as to why stabilization efforts have been unsuccessful. First, the whole personnel

management system is based on an individual replacements philosophy which buys administrative convenience in the near term at the potential cost of soldier lives in the event other than elite units were to be sent to war. Second, the system whereby unit status is periodically assessed is conditioned to report in terms of individuals-in-position, rather than in terms of high-performing-units-in-position. It seems only rational that commanders in the field would learn to destabilize their small units as an adaptive response to that measurement system, and that they would accept the destabilizing effects of centrally managed personnel movements, given that those movements are efficient in aiding attainment of high status report ratings. A variety of rationalizations is offered to justify the current system, e.g., it provides the commander the flexibility he needs, it preserves the local commander's autonomy, etc.

However, it would seem likely that combat arms commanders would value a higher probability of success in combat over garrison flexibility and autonomy, if realistically presented that choice. The problem is that with the current system for assessing unit status, and the current individual replacements culture, high "survival value" choices are not readily apparent.

This report contains three major sections. The first is a review of the literature on small unit stability covering more than a decade of research. The second presents stability data from current research, including a current COHORT battalion. The third contains a discussion of selected policy initiatives which could be taken at division level to stabilize enlisted soldiers even in the face of an individual replacements system, and recommended changes in the Unit Status Report (USR) which will provide incentives to do so, while at the same time making the personnel portion of the USR a more accurate and effective tool. It will be argued that if these changes to the USR and the policy initiatives are implemented Army-wide, they would:

1. Enhance the effectiveness of the COHORT program, by removing current policy obstacles to stabilization within the battalion, and
2. Enhance cohesion development and small unit performance in non-COHORT units to much the same extent as is now visualized for COHORT units.

If these two objectives can be accomplished, the Total Army can realize the benefits of cohesion enhancement, capitalizing on the benefits of COHORT logic but without incurring unacceptable additional costs. Indeed, as will be seen, most of the recommended policy initiatives are essentially cost-free. If combined with a concept for home-basing and short-term rotational deployment, very substantial cost savings can be projected.

BACKGROUND: COHORT AND NON-COHORT

In May 1980, a Chief of Staff memorandum established the Army Cohesion/Stability (ARCOST) Action Team. Its stated purpose was "... to review current Army activities/policies and possible new initiatives which impact on turbulence, stability, and unit cohesion throughout the Army." Its primary objectives were "... to identify current policies which degrade these areas and identify new initiatives to reduce turbulence, improve stability, and enhance unit cohesion." (CSM 80-15-13, dated 5 May 1980).

The CSM cited several references which had also addressed the problem of cohesion in units, and the first point in its discussion was the following:

References recognized that cohesiveness and stability of Army units are paramount to readiness, retention, and professionalism and identified/directed certain ARSTAF and MACOM enhancement efforts. Various ARSTAF and MACOM efforts in this area are continuing.

The ARCOST Action Team confirmed that cohesion is essential for high combat performance, and hence essential to readiness in units which may need to fight on short notice. Several initiatives were recommended, among them actions that were to lead to a formal program to develop and implement a New Manning System (NMS). It was intended that the NMS would provide a cost-effective alternative to the prevailing personnel management system that had been steadily eroding the combat effectiveness of the Army. The New Manning System (later renamed the Unit Manning System, or UMS) was to enhance combat effectiveness by keeping soldiers and their leaders together in units longer, which would provide conditions favorable to both higher levels of collective skill and higher levels of cohesion. (Military cohesion is generally defined as the bonding together of members of a unit or organization in such a way as to sustain their will and commitment to each other, their unit, and the mission (Johns, 1984)).

The New Manning System was based on four basic precepts; personnel stabilization, unit rotation, home basing, and regimental affiliation. It had two major components: the U.S. Army Regimental System and the Cohesion, Operational Readiness and Training (COHORT) Unit Movement System. The COHORT unit movement side of NMS envisioned recruiting, training, stabilizing and deploying units -- not individuals. All recruits for a specific COHORT unit went through initial entry training (IET) together. They were then kept together and assigned to a COHORT unit, where they joined their chain-of-command for the three-year life cycle. The COHORT unit, under the traditional COHORT model, trained up to combat effectiveness in the CONUS phase, then deployed overseas. When the second phase was finished, the COHORT unit reached the

end of its life cycle and was disestablished, to be replaced by another COHORT unit which by that time was ready for its own overseas phase.

Several COHORT models have been fielded, to include variations in both size and rotation cycles. Both company and battalion-size COHORT units have been fielded. There also have been both deploying and nondeploying models, and 12-24, 18-18, and 24-12 month rotation cycles have been utilized for deploying units. In addition, there has been variance in the timing of cadre "wrap-around", the handling of replacements, and the relative eliteness of the soldiers as well as their chain-of-command members. (Originally, COHORT units were carefully handled and front-loaded for success, as expected of a new program. Later fielding of units indicated changes in quality of soldier fill as well as cadre fill, as COHORT became more representative and less "special.")

On 2 October 1986, the previous Army Chief of Staff approved a Unit Manning System (hence, the name change from NMS to UMS) methodology that refocused the COHORT concept and outlined new concepts for Unit Manning operations. The main tenet of his UMS vision was the creation of a peacetime replacement system that would support the transition to war and to a wartime replacement system (DA Message, 171637Z, Nov 1986). On 24 February 1988, the current Army Chief of Staff approved the continuation and expansion of the UMS concept.

Two distinct types of COHORT units will exist in the near future: Traditional COHORT and Sustained COHORT. Traditional COHORT companies will continue to be formed in FORSCOM and WESTCOM, and after 24 months will deploy to Korea. These units will receive replacements at the 12- and 24-month points. Sustained COHORT, or package replacement units, will be formed by either "kickstarting" as a traditional COHORT unit and later converting to package replacements or by converting directly from the individual replacement system. Once converted, these units will receive sustainment packages every four months. The 7th ID(L) and the 10th ID(L), however, will receive packages every 12 months, as a test of the sustainment concept.

The Chief of Staff also directed that a thorough review of the company COHORT models be conducted. After a preferred model is selected, a thorough field evaluation will be conducted to assess the impact of UMS on the Army and to compare training readiness among UMS options. (UMS Information paper, dated 29 March 1988).

Research and evaluation efforts have been conducted over the past several years in order to attempt to measure the relative effectiveness of the COHORT program. Since the program was an evolving one, most of the research efforts have been less than

conclusive. A "fix as we go" approach was taken throughout the fielding of the various COHORT models. Because of the ongoing changes, it has been difficult to conclude what COHORT was and/or is, much-less what has or has not been effective about it. Evaluation efforts also tended to focus on measures that probably were not germane to COHORT and almost certainly were not germane to combat readiness. In the absence of meaningful measures of unit combat performance, COHORT was compared to non-COHORT on such measures as AWOL rates, AFPT scores, marksmanship results, SQT scores, etc. Even the opinions of field commanders have been somewhat mixed; some swear by the COHORT program, some swear at it as too hard to do and/or too expensive to the rest of the Army.

There is little dispute that one thing that COHORT has achieved consistently is an initially impressive degree of horizontal bonding among the first-term soldiers. Vertical bonding, however, has not been shown to exist to any higher degree in COHORT units than in non-COHORT units. And even the initial high degree of horizontal bonding seems to erode over time. On most measures of cohesion, morale, or soldier will, many COHORT units have shown a regression, after a year to 18 months from unit activation, to the point that little or no difference from other units is discernible. And, of course, the very nature of the three-year life cycle, upon which COHORT was based, meant that even the most cohesive unit would inevitably "self-destruct" by disestablishing according to schedule. Considering the time needed to start up a new unit, the half-life of even the most successful COHORT unit, by its very design, could be expected to be relatively short.

In sum, whereas COHORT units tend to show an initially higher degree of horizontal bonding, both COHORT and non-COHORT units leave lots of room for improvement on both the horizontal and vertical dimensions of cohesion, sustainable over time. In other words, it has been demonstrated that cohesion can be built in the training base; it has not been adequately demonstrated that cohesion can then be sustained in TO&E units. An obviously critical issue is to learn why vertical bonding is only mildly effective in COHORT units, and why horizontal bonding deteriorates to the extent it does.

PERSONNEL TURBULENCE

One obvious factor is personnel turbulence. One of the major original objectives of COHORT was to keep soldiers and their leaders stabilized longer in the same unit. All theories of cohesion formation include stability of unit members and their leaders as a first condition. Personnel turbulence virtually forces unit members to establish more superficial relationships with one another, and leaders to have more uncaring attitudes toward their followers. As the DCSPER, DA, stated in 1984, "... efficiencies in individual replacements take no account of unit

cohesion in the tank company, cannon battery or the infantry battalion. Individual replacements result in a constant flow of soldiers into and out of units, ... the turbulence inherent in an individual replacement system may diminish unit cohesion and esprit at the cutting edge of the Army." Elton, R. M. (1984), Army Green Book, p. 220.

To the extent personnel turbulence exists, there is good reason to believe that unit cohesion will be attenuated. In addition, there is good reason to believe that lasting Army-wide personnel turbulence will impact on the basic operating culture of the Army, and thus have more far-reaching effects even than a reduction in combat arms unit cohesion. It thus is a critical issue to investigate.

This research report indicates that turbulence within Army units has remained roughly constant over the period of time investigated, and that it is roughly the same in COHORT and non-COHORT units. The Army, despite COHORT, has thus not made a major impact on reducing turbulence, and minimizing its adverse impact on cohesion. In order to capitalize on the opportunity afforded by COHORT, as well as to spread the benefits of high cohesion and opportunity for extended collective skills development Army-wide, it seems essential to "fix" personnel turbulence. Both horizontal bonding and vertical bonding, within both COHORT and non-COHORT units, could be noticeably improved by measuring, acknowledging, and correcting the high levels of turbulence now being experienced at small unit level in nearly all Army units.

DEFINITIONS OF TURBULENCE

In his Army Green Book article of 1984, LTG Elton wrote, "As commanders and first sergeants know, another name for 'turnover' is 'personnel turbulence...'. Actually, more careful definitions, which distinguish between those two terms, are necessary in order to clarify the current state of personnel stability at the small unit level. Although the Army recognizes and measures turnover, for the most part turbulence goes unrecognized and unreported in units.

Turnover refers only to personnel who depart battalions. It does not include job changes within a battalion or unit reassignments below battalion level. In fact, AR 220-1 provides the following guidance on USR reporting:

- (1) Personnel turnover percentage provides an indicator of unit turmoil by comparing the number of personnel reassigned, discharged, or separated during the 3 months preceding the "as of" date of the report to assigned strength on the "as of" date.

(2) Do not count transfers within the reporting unit.

Several definitions of turbulence have been formulated in various research efforts that have examined personnel stability. In a General Research Corporation report (GRC, 1982), turbulence was defined as "the rate of reassignment of individuals from job to job in their career in the Army." The most useful benchmarks for measuring turbulence were identified as reassignments, turnover, and turnaround. In other words, turbulence was defined as synonymous with any sort of movement of personnel. Their definition thus included both measured (by USR) and nonmeasured movement.

In a more recent research effort, turbulence was defined as "the irregular movement of soldiers into and out of positions on a fixed battle roster." (Quinzi, 1986). Another report (Drucker and Eaton, 1980, p.48) makes a distinction between position turbulence (rate at which personnel change from one duty position to another within the same tank crew) and personnel turbulence (rate at which personnel change from one crew to another, keeping the same duty position). The researchers determined mean turbulence rates by combining position and personnel turbulence.

Kress (1981) also distinguished between duty position turbulence and crew personnel turbulence: "For example, the tank Commander leaves the crew, his position is filled by the Gunner, and a new man joins the crew to fill the Gunner's position. This would result in two cases of duty position turbulence and one case of crew personnel turbulence (two duty positions are affected but only one new man has joined the crew)" (pp 29-30).

Another variation is offered by Amendolia (1981): "A unit's personnel turbulence rate is computed by dividing the average number of personnel assigned to a unit by the total number of job assignment changes over an equal period of time." As major subcategories of turbulence, he offers personnel turnover, personnel shortages, personnel not-present-for-training, and reassignments within the unit. Amendolia noted that the subcategories are dynamic and interrelated, resulting from both external and internal influences (p.26).

The above discussion is provided not to confuse a relatively simple issue, but rather to point out that different definitions of turbulence exist, and that turbulence looks different from the various organizational perspectives. To the TAPA assignment officer, movement has not occurred unless a geographic relocation results from PCS orders. To the battalion commander, movement occurs when a soldier leaves his battalion. But to the squad leader, it makes little difference whether a soldier departing his squad remains in that battalion or has PCS orders to Tanzania. The impact is the same; a new arrival must be assimilated into

that primary combat group to take the place of the departing squad member. The "team" becomes a new team as a result of new membership. (However, time and effort must be invested by everyone in the squad, including the new member, if the "team" is actually to become a team. The impact of high turbulence is that soldiers get tired of making unprofitable investments of time and energy to build new teams, and gradually cease to do that work. The end state is a relative lack of caring, and a low level of both horizontal and vertical bonding.)

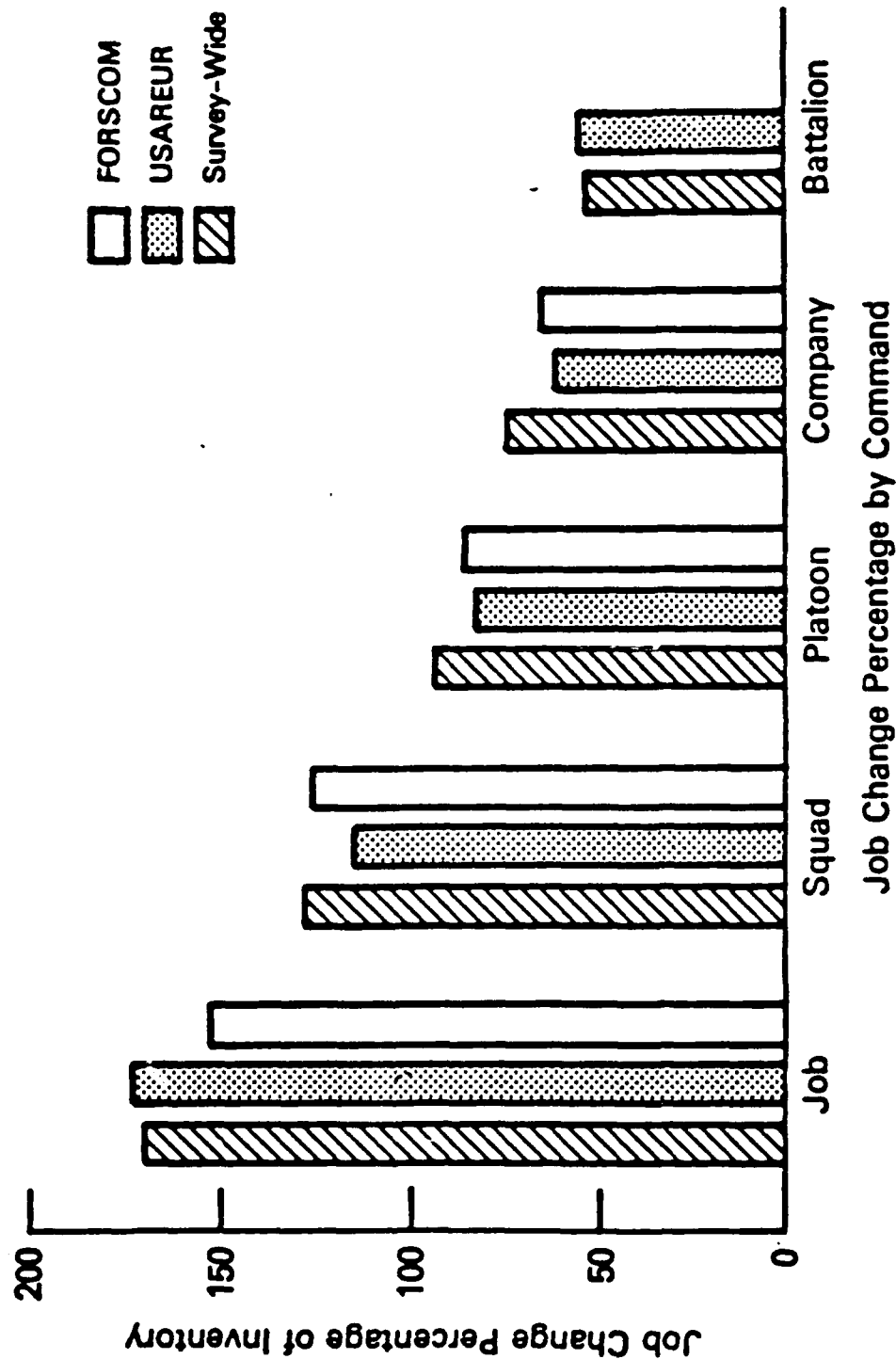
PREVIOUS RESEARCH ON TURBULENCE

Several research efforts have addressed the troublesome aspects of personnel turbulence and the high costs that Army units pay as a result of turbulence remaining relatively uncontrolled, unmeasured, unreported, and seemingly unacknowledged.

In a laborious three-volume report (Wroth, et al. 1982) prepared for The Manning Task Force, ODCSPER, DA, data collected in the field from combat arms soldiers were analyzed and related to HQDA data to quantify the magnitude of inter- and intra-battalion movement and to tabulate the reasons for job changes. Observations, findings, and recommendations were provided, pertaining to the manpower and personnel management processes and policies at the time. Although the individual replacement system initiates movements and thus paces movements, the rate of movement is then accelerated at every level (see Figure 1) as commanders adjust their manning in an effort to maintain operational capability, as well as strive to enhance professional development and career progression. Commanders attempt to maintain readiness by local reassignments of personnel in order to keep key positions filled while losing personnel, in a seemingly random manner, to overseas assignments. The driving force which initiates the chain of events is "tour (i.e., individual) equity"; soldiers take their turns on overseas levies. Commanders at all levels then reassign personnel internally in order to ensure that all their elements are balanced, as well as operational.

It turns out that HQDA-directed moves account for less than half of all such position changes. The remainder are generated at the MACOM, division, installation, or lower level, as commanders seek to cope with the externally generated moves. Actual individual turbulence is estimated to be three times the battalion (reported) turnover rate. In other words, for every soldier who departs the battalion, three soldiers experience a job change as a result. The major Army-wide cause for job changes of personnel was reported to be to fill another vacancy caused by movement of another soldier.

JOB CHANGE PERCENTAGE FOR CY 1981 AT DIFFERENT UNIT LEVELS



(Source: General Research Corporation, "Turbulence Definition and Measurement," 1982)

Figure 9. Job change percentage for CY 1981

GRC also reported that policies affecting personnel movement were not uniformly recorded or centrally managed. Despite complex internal relationships between policies, policies were often established or modified with inadequate consideration of the impact of the change on the rate of personnel movement (turbulence) or integration with other policies under the same or other manning functions (p 2-13). The report calls for policy to expressly instruct commanders regarding their responsibilities toward unit cohesion and turbulence. (There is clearly a trade-off between improving stability and cohesion and achieving strength readiness goals in the readiness reporting system). The GRC report calls for establishing a system for continually measuring and monitoring turbulence.

More recently, a 45-week TRASANA study (Quinzi, 1986) of turbulence in a mechanized infantry battalion, in Third Infantry Division during 1983-84, yielded the following results (see Table 1):

1. A full (9-man) Bradley squad was available for training with squad leader and assistant squad leader of the appropriate TO&E rank only 16% of the time.

2. The median time that a squad leader-gunner pair remained together in the same vehicle was nine weeks.

3. The median time that an entire 9-man squad remained together was four weeks.

4. The overwhelming majority of turbulence was due to changing job assignments within the battalion (internal turbulence).

In order to determine the extent to which the Unit Manning System and the COHORT program have resolved the turbulence problem, several recent sources of available data were screened. These sources included demographic data collected by ARI as part of the Army Values survey in 1986, ARI data on battalions rotating through NTC, and ongoing research efforts by both ARI and WRAIR in COHORT units within the light infantry divisions, to include units from 10th, 7th, and 6th Infantry Divisions (Light).

Army Values Survey

In 1986, in a world-wide survey conducted in support of the theme Year of Army Values, ARI researches gathered data from thousands of soldiers across all ranks and geographic areas. A look at the demographic data from these surveys was undertaken as part of this report on turbulence. The answers to three questions were analyzed:

Table 1

LEADER-LED TURBULENCE

(1983-84 DATA ON BRADLEY FIGHTING VEHICLE SQUADS)

<u>COMBINATION</u>	<u>MEDIAN TIME TOGETHER IN WEEKS</u>
SQUAD LEADER-GUNNER	9
SQUAD LDR-GUNNER-ASST SQD LDR	7
ENTIRE 9-MAN SQUAD	4

(source: Quinzi, A. " Personnel Turbulence in a Mechanized Infantry Battalion "
TRADOC Systems Analysis Activity, White Sands, NM, 23 Oct 86)

How long have you been in your current unit?
 How long have you been in your current duty position?
 How long have you had the same immediate leader?

The responses reported are shown graphically in Figures 2 and 3. Figure 2 depicts responses of FORSCOM junior enlisted from both COHORT and non-COHORT units. Figure 3 breaks out only the COHORT sample.

SMALL UNIT INTEGRITY AS A FUNCTION OF TIME
 FORSCOM, E-1 to E-4, COHORT Only

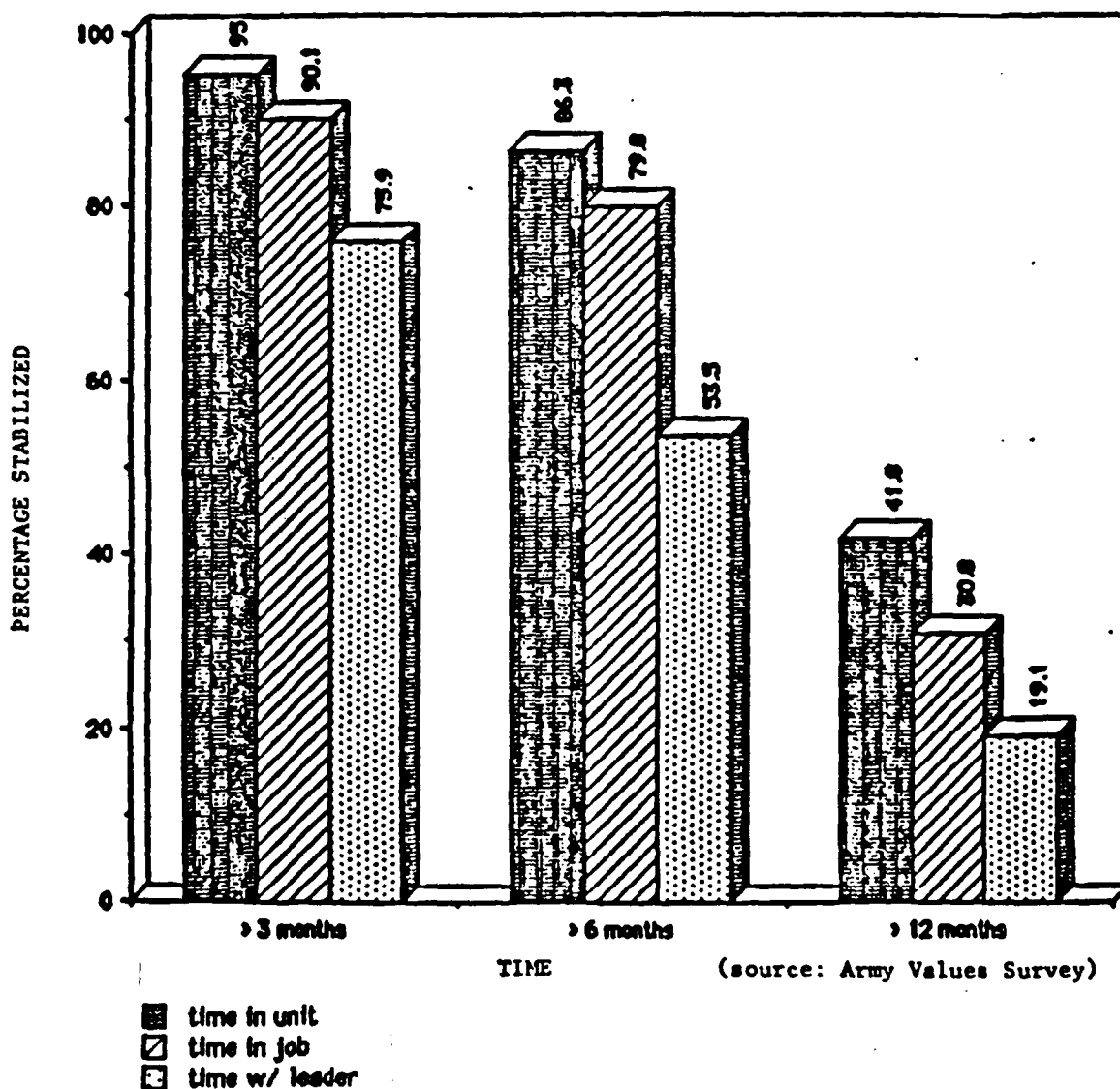


Figure 2. Small unit integrity as a function of time

SMALL UNIT INTEGRITY AS A FUNCTION OF TIME
 FORSCOM, E-1 to E-4, ALL (includes COHORT and non-COHORT)

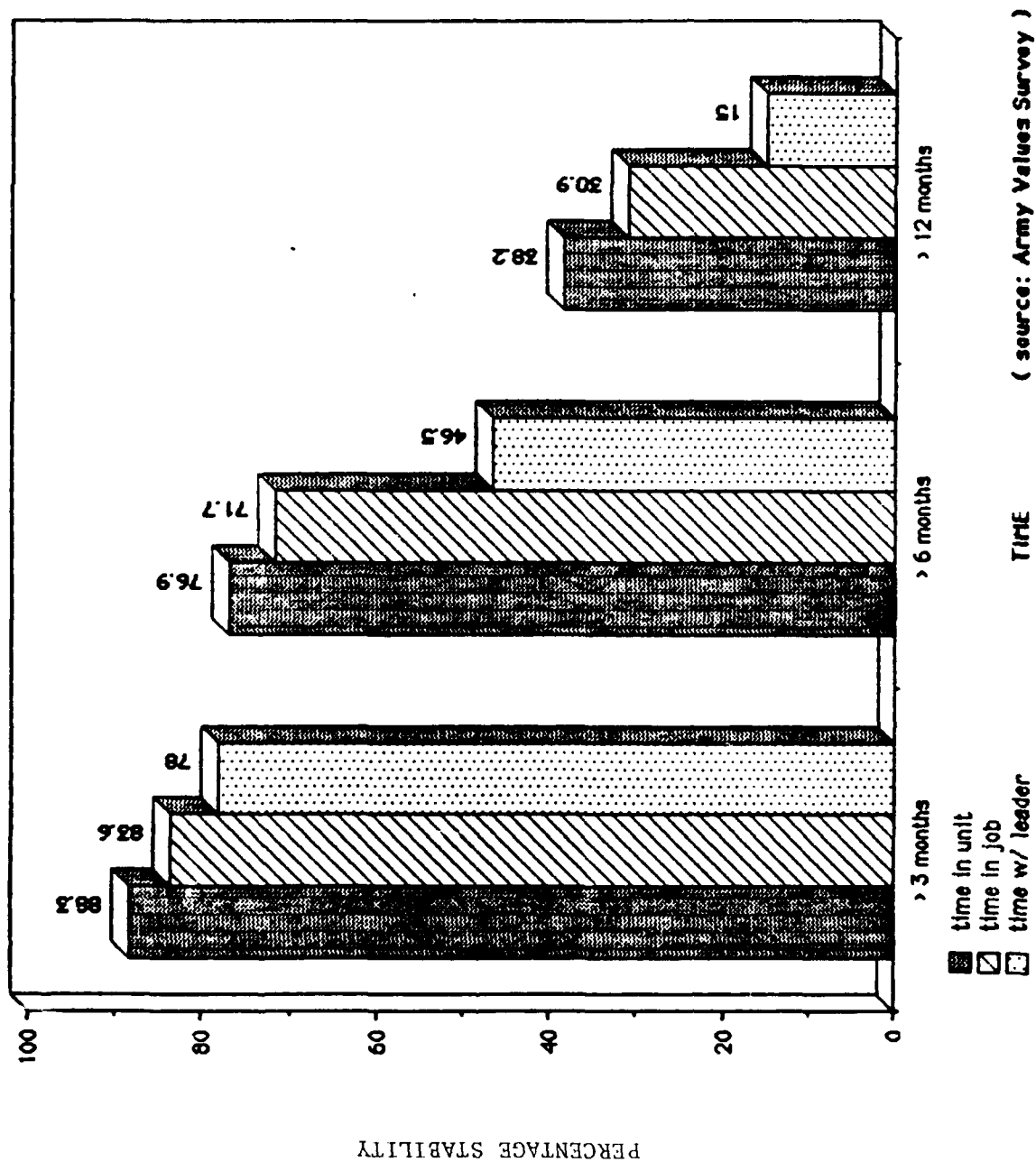


Figure 3. Small unit integrity

In a 1981 effort (Kress, 1981), Tank Commanders and Gunners from 54 tank crews were tested on nine Tank Gunnery Training tasks. Data were also collected on tank crew turbulence and TC and GNR job experience. Organizational Climate and Leadership questionnaires were administered to all crew members in the 54 tank crews.

Crew turbulence was computed by comparing the crew rosters from nine weeks prior to gunnery with the crew rosters on Tank Crew Gunnery Qualification Course (Table VIII). Of the 216 duty positions, 109 (50 percent) experienced a personnel change over the nine week period. Out of a total of 54 tanks, 47 (87 percent) experienced at least one instance of turbulence in this time frame; 50 percent of the tank crews had been together 1.2 months or less (p. 30).

Interestingly, no relationship was found between tank crew turbulence and gunnery performance. The job experience of the gunner in terms of length of time as a gunner and prior experience with live fire gunnery were both positively correlated with performance (Table VIII). However, the TC attitudinal measures of group cohesion correlated positively with Table VIII accuracy. The report concluded, "There is also evidence to suggest that the current Tank Crew Gunnery Qualification Course (Table VIII) does not require the performance of some critical gunnery tasks, especially on the part of the Tank Commander." (An interesting implication is that acceptance of the impact of turbulence on crew/team performance as a part of the culture may have led to the construction of crew/team proficiency tasks that do not require the teamwork that turbulence impacts.)

Master Gunners in USAREUR estimated (Sanders, 1987) that only 4 to 12 tank commander-gunner teams remain together in their battalion over a four-month period. The CG of 7th ATC identified tank crew turbulence as important for further investigation.

In a 1981 Master of Military Science thesis, Amendolia surveyed histories of twelve infantry divisions and eight infantry regiments, selected at random, in an effort to determine the personnel turbulence of the various units that were activated for World War II. Looking at both the activation phase and the deployment phase, he concluded: "The turbulence in both phases was significant enough to derogate any possibility of developing unit cohesion that could be gained from personnel stability." (p. 11)

Amendolia cited Bialek's (1977) example (see Table 2) of what can happen to a unit in a period of four months. In the example, of the original 134 company members, 102 (76%) remained in the unit, 52% in the same squad, and only 36% in the same duty position. That is, at company level, 24% turnover translated to 64% personnel turbulence. In that case, the personnel turbulence rate was almost three times the personnel turnover rate. Amendolia

concluded: "The significance of this example is that the personnel turnover rate can generate a personnel turbulence rate that exceeds 100%." (p. 32) He added that under those conditions, "The ARTEP evaluation loses its validity too quickly to be of use in the planning function because of personnel turbulence." (p. 75)

Table 2

TURBULENCE AT SQUAD LEVEL

- **NUMBER OF PERSONNEL IN COMPANY AT START: 134 100 %**
- **STILL IN COMPANY FOUR MONTHS LATER: 102 76 %**
- **STILL IN SAME SQUAD: 70 52 %**
- **STILL IN SAME DUTY POSITION: 48 36 %**
- **ALTHOUGH THE TURNOVER RATE IS 24 % OVER THE FOUR MONTH PERIOD, THE TURBULENCE RATE IS 64 %, OR ALMOST THREE TIMES AS HIGH.**

(source: Amendolia, J. " Training Management and Personnel Turbulence, Masters Thesis, Command and General Staff College, 1981)

He makes another interesting observation concerning battle rostering (the practice of slotting soldiers in positions other than those in which they actually work). "The fact that units use battle rosters is an admission that there are manpower problems that may not be solvable by simply adding numbers of people ... - These battle rosters may make commanders feel better about their personnel shortage situation, but they do not solve the problem of personnel turbulence generated by those personnel shortages" (p. 34).

In a 1980 report (Funk, S.L., Johnson, C.A., Batzer, E., Gambell, T., Vandecaveys, G., & Hiller, J.), questionnaires were collected from 303 personnel, and structured interviews were given to 198 personnel in six FORSCOM divisions. The report described how leaders from division through company level viewed conditions which detracted from combat training. The findings went on to describe each detractor, its impact on training, and methods being used to reduce the negative effects of stated detractors (pp i-ii). Personnel turbulence, especially among NCOs, was consistently named as a detractor to combat training. At division level, it was ranked as the #1 detractor (p. 27). Across the divisions sampled, enlisted turbulence averaged 71% per year leaving the division (p. 36). This figure did not consider internal turbulence, which has been shown to triple the actual rate of personnel movement. (Simple math shows that personnel turbulence would have to have been reported as being approximately 200%, if anyone had been keeping such records.)

Another alarming finding was the rate at which special duty authorized (SDA) -- borrowed military manpower -- personnel were taken from units: to fill shortfalls in recognized civilian needs for key installation activities; to augment higher headquarters staff elements for the purpose of handling peacetime and administrative requirements; and to staff functions/activities considered necessary by the local commander. Division headquarters were typically staffed at over 100% authorized strength (ranged from 118-180%) with lower numbers of augmentees found at brigade, battalion and company level (pp 28-29).

A novel approach to addressing the turbulence challenge was taken by Drucker and Eaton (1980). Questionnaires and interviews were administered to battalion commanders and subordinate leaders in twelve armor battalions in USAREUR, each augmented in strength with the assignment of 54 additional tank crewmen, and in six battalions not augmented in strength. In this test of the augmented tank crew or "fifth crewman" concept, reported improvements in unit performance were attributed primarily to the presence of the additional tank crewmen. Improvements in training were reported to have resulted from more men available for training, improved crew coordination, and improved crew stability. Improvements in combat readiness were reported to have resulted from full tank crews, stable and trained crews, and better

maintained equipment (pp 56-57). In other words, it was demonstrated that the assignment of a "fifth tank crewman" increased the probability that at least a full crew of four would be available to man the tank! Not surprisingly, this method worked best when the augmentees were assigned directly to platoons where a sense of "belonging" could be cultivated, rather than to battalion headquarters for distribution as needed.

The results of the survey, however, indicated that personnel turbulence had no effect on tank crew qualification. (As noted earlier, one must question whether Table VIII is a test of individual rather than team proficiency, and whether it provides any true test of cohesion as a combat multiplier. Would the results change if the targets were firing back at the crew?) The primary benefit of turbulence was seen to be the opportunity to provide cross training. The detrimental effects were attributed primarily to disruption of the crew and a subsequent loss of pride in the crew or tank. Techniques that were used to reduce turbulence included making efforts not to transfer men within the company, requiring approval for all crew changes, increasing accountability of personnel, and monitoring all crew changes (p. 55).

A 1978 research effort (Eaton and Neff) had two objectives. First was to determine the degree of tank crew stability in five battalions in USAREUR. The second was to determine the relationship between tank crew stability and tank gunnery performance on Table VIII at Grafenwoehr, FRG. The data presented indicated that there was considerable turbulence in the battalions observed and that complete crews had been together an average of less than two months. While the results indicated no significant relation between gunnery performance and the time the entire crew had been together, they did indicate that the longer the tank commander and gunner had trained together the more rapidly they opened fire on their targets. It could thus be concluded that emphasis should be placed on commander-gunner stability, if not whole crew stability. Also, the longer a gunner had been a gunner, the more targets his tank hit on Table VIII, further suggesting that stability of key positions may, indeed, be important (pp. 10-11).

CURRENT DATA

This review of the literature on turbulence clearly indicates that in the pre-COHORT era, at least, personnel turbulence was unacceptably high and had adverse impact on unit performance at the small unit level. The lower into an organization researchers delved, the worse the turbulence rate became. Consistently, turbulence at the individual soldier level was found to be nearly three times as high as the turnover rate being reported at battalion level.

National Training Center Data

ARI data collected on battalions preparing for deployment to the National Training Center indicates that key events may add to, rather than detract from, the rate of turbulence experienced at small unit level. As shown in Figure 4, 1986-87 data indicates that there was a "borrowed labor" syndrome at work. Units deploy to NTC with personnel borrowed from other units at their installation in order to bring unit strength as close to 100% fill as possible. Upon return from NTC, these soldiers normally return to their original units, thus neutralizing both the "cohesion enhancement" effect realized through the NTC experience and the collective training value of both NTC and subsequent battalion training. Furthermore, an alarmingly high percentage of unit members are relatively new to their NTC units. Ongoing research is now focusing on how long small unit members and their leaders remain in their units after NTC rotations.

ARI and WRAIR Current Research with COHORT Units

Scientists from the Walter Reed Army Institute of Research (WRAIR) have been involved in the field evaluation of UMS since its inception in 1981. To date, WRAIR researchers have visited 53 conventional and 82 COHORT companies. They have studied eight rotated combat battalions and their seven traditionally organized sister battalions. They have followed the development of five light infantry battalions from the outset of the new Light Division concept. Their efforts have involved more than 1650 interviews and over 26,000 survey responses. In a 1987 summary report on their research findings and the important lessons learned, WRAIR researchers reported that "Interviews and observations revealed little appreciation by battalion staff, and no appreciation on the part of company level leaders, for the importance of military cohesion. The practice of treating incoming replacements as individuals rather than as a cohesive group to be kept together suggests that the concept of maintaining cohesion has not penetrated to the small unit level even now ... Unless this mindset is changed -- that cohesion is the business of company leaders, not just HQDA -- the whole UMS experience will melt (sic) back into the individual replacement system it was designed to eliminate." (WRAIR, 1987)

Initial findings from an ongoing ARI research project within the 6th Infantry Division (Light) in Alaska mirror the findings cited above. One COHORT battalion is presently being followed as a part of a larger effort to evaluate both chain-of-command training and organizational policies which are designed to enhance small unit leader development. These initial findings indicate that internal turbulence within that COHORT battalion is as high as might have been expected on the basis of the findings reported above, even though the chain of command from the outset focused on efforts to stabilize unit members, particularly leaders. Within

the first three months following unit activation, one battalion experienced an average of 7 chain-of-command changes (squad leader through company commander) per company. One squad leader position had changed a total of 5 times during that period.

Figures 5 and 6 show summary findings aggregated at battalion level from data collected four months after first-term soldier fill was accomplished. Focusing only on first-term soldiers, the data of interest are under the categories of 1-3 Months, and 4-6 Months. (Since first-term soldier fill occurred four months prior to data collection, all first-term soldiers should fall in one of these two categories.) Figure 5 shows that about 22% of the battalion reportedly had changed team/section between those two points in time, and that about 14% had changed platoons. Similarly, about 32% reportedly had different squad leaders, and over 40% had different platoon sergeants. (Leader turbulence probably contributes to the increase in apparent turbulence between Figures 5 and 6.) To confirm that these data probably reflect first term soldier turbulence in rifle companies, the data were disaggregated and the rifle companies examined in isolation for E-1 through E-3 soldiers alone. The actual turbulence in rifle companies for these grade levels was within a percentage point of the aggregated battalion data.

Clearly, the systemic forces which work to produce turbulence are more than commanders at the battalion level can cope with (Maguire and Boice, 1988). That this is a clear threat to real combat readiness is indicated by the fact that preliminary data from other ARI research in progress now shows correlations on the order of .5 between leader-led stability and unit performance at NTC.

McGee (1987) reported the results of personnel "turmoil" on the combat effectiveness of infantry squads in an overseas infantry battalion. (Turmoil was defined as "self-inflicted personnel shifts"). Squad performance on live fire exercises was measured against five personnel assignment factors, to include adds, drops, total changes, squad strength, and squad leader changes.

The results indicated that more adds, more drops, or more total changes were all reasonably accurate predictors of lower scores on the squad collective performance measures. A change of squad leaders, especially if accompanied by other personnel changes, resulted in lower performance scores. Also, squads with "veteran" squad leaders generally were more consistent collective performers and usually outperformed squads with new squad leaders, particularly in high stress events.

NATIONAL TRAINING CENTER: SQUAD/SECTION/TEAM MEMBERS

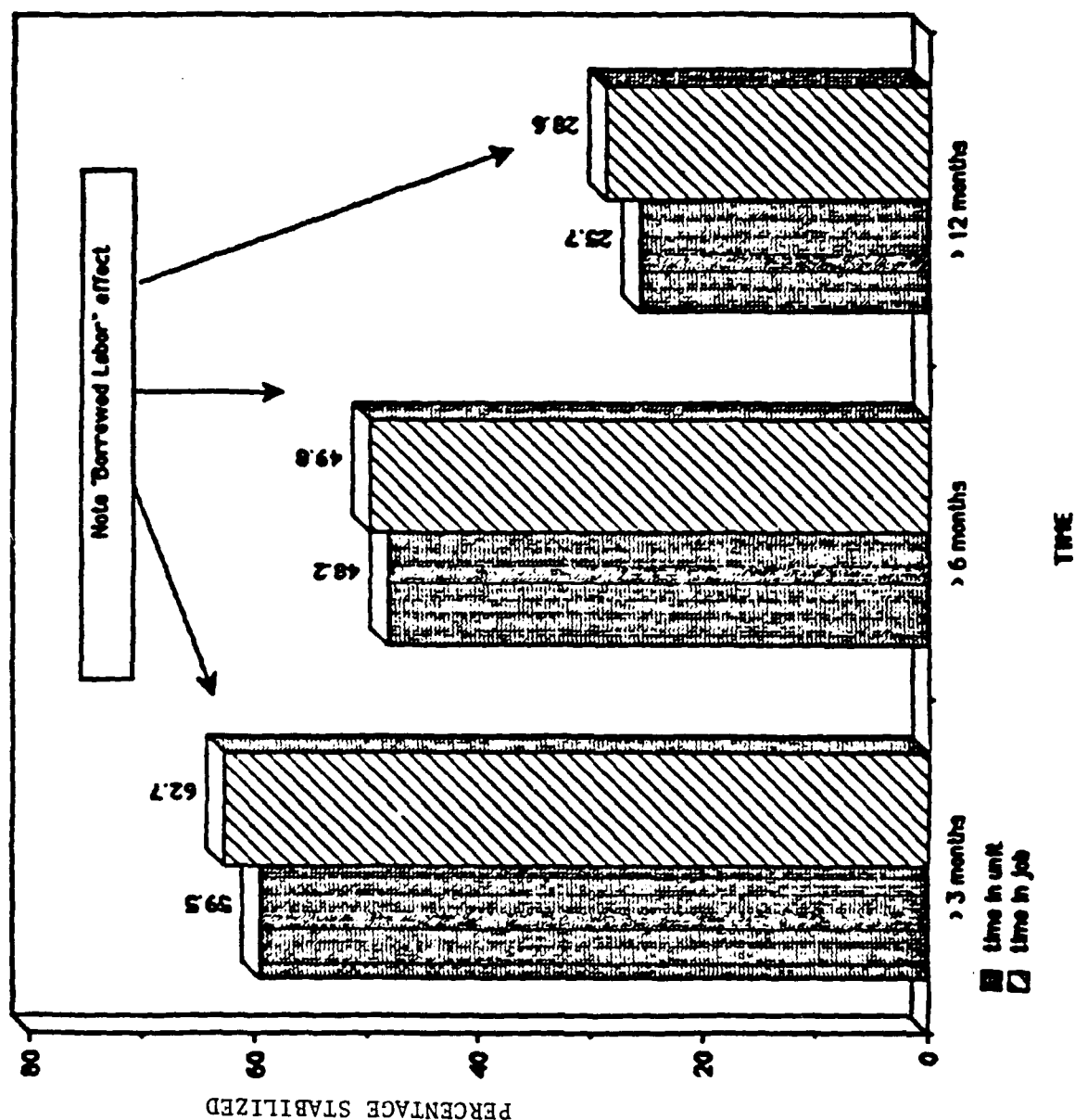


Figure 4. National Training Center: squad/section/team members

Table 3

POST-NTC SURVEY (SEPTEMBER 1986)

SURVEY CONDUCTED AT HOME STATION 30 DAYS AFTER BATTALION
RETURNED FROM NATIONAL TRAINING CENTER

• 13.8 % OF SOLDIERS SURVEYED RESPONDED THAT THEY HAD BEEN "NTC FILLERS"
(ON SPECIAL ASSIGNMENT TO A UNIT JUST FOR NTC)

• MORE THAN HALF RESPONDED THAT THEY HAD BEEN WITH THEIR NTC PLATOON
FOR LESS THAN 6 MONTHS PRIOR TO NTC

14.9%	< 1 MONTH
37.6%	< 3 MONTHS
54.1%	< 6 MONTHS
76.3%	< 12 MONTHS

TURBULENCE IN COHORT BATTALION

How Long in Unit

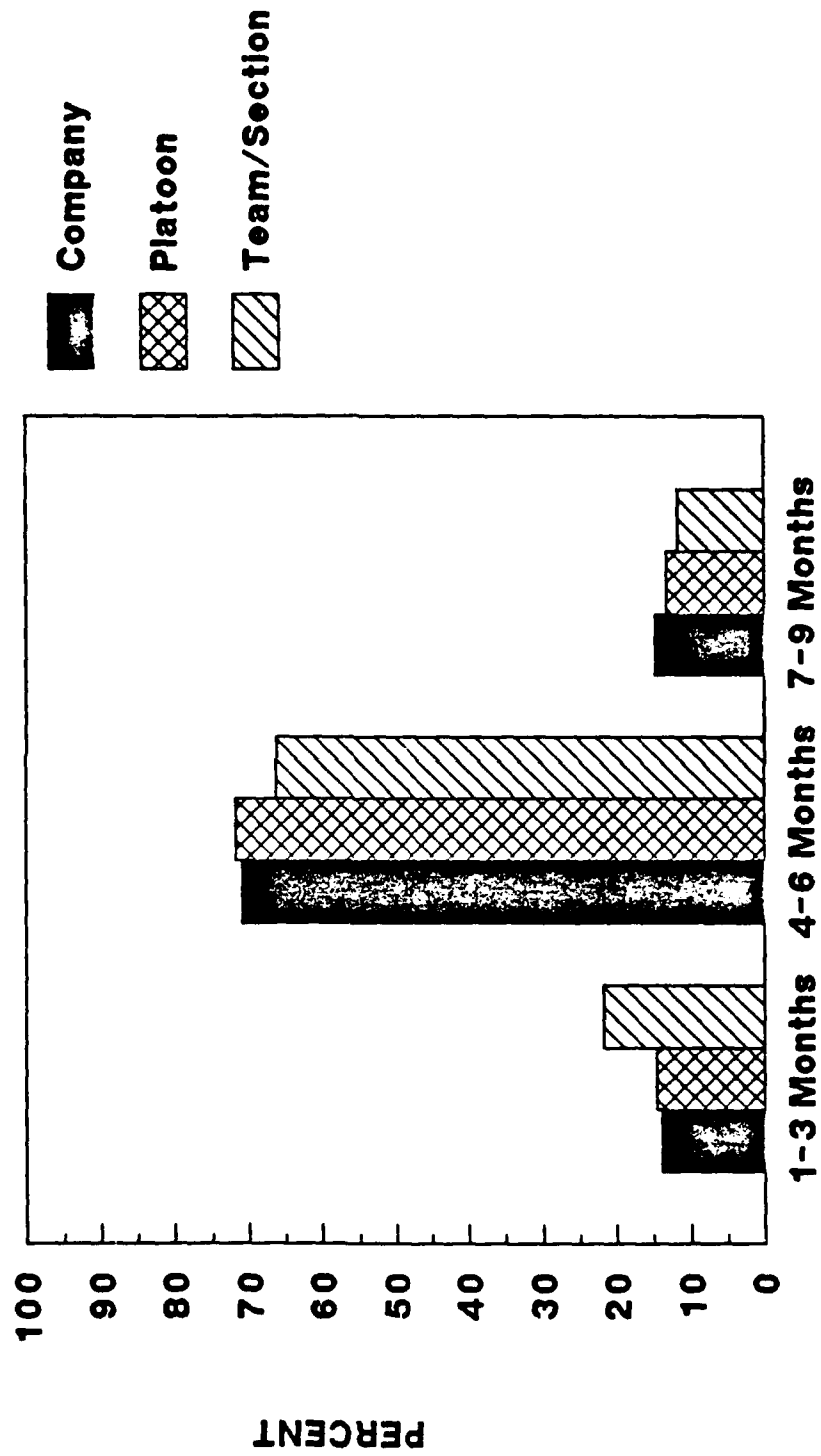


Figure 5. Turbulence in COHORT battalion

LEADERSHIP AND UNIT PERFORMANCE

STABILITY IN COHORT BATTALION -- CURRENT DATA

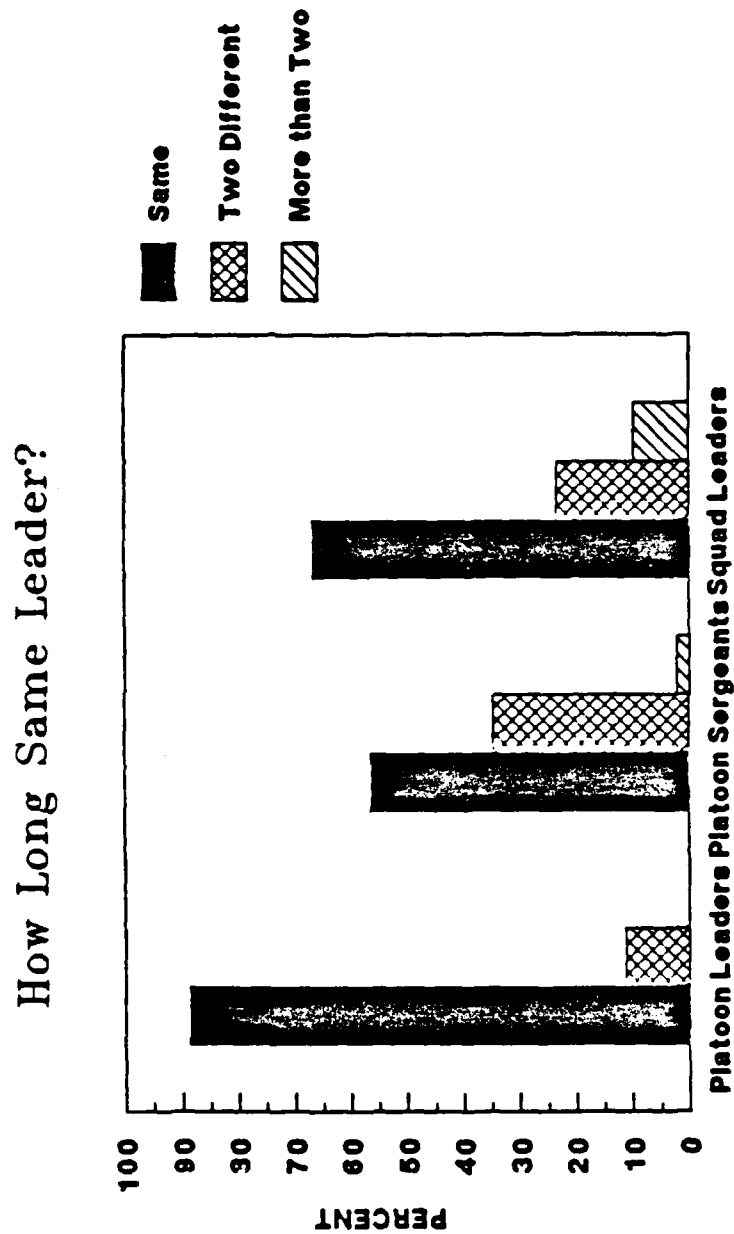


Figure 6. Stability in COHORT battalion

McGee proposed that it is reasonable to expect that personnel stability is a necessary condition to allow teamwork (communication, coordination, and cooperation) to evolve within a rifle squad. That teamwork pays off in terms of combat performance on collective tasks. Hence, personnel stability (squad integrity as well as leader-led stability) has direct linkage to combat effectiveness at the small unit (primary combat group) level. Though this was not a rigorously controlled experiment, the results certainly suggest that the author's logic is well founded.

General Officer Movements

In a recent article, Bodnar (1986) used data from the 1986 General Officer lists from all of the services, and determined that almost half of all general officers had changed jobs within a 12-month period:

"Nearly half of all generals, and over half of all four-star officers, have changed jobs in the past year. That turbulence at the apex of America's military command structure ... creates trickle-down effects that, most observers believe, seriously undermines cohesion, stability, and readiness in subordinate units and staffs." (Bodnar, 1986).

CONCLUSIONS FROM TURBULENCE RESEARCH

1. Current and historical turbulence data, measured at small unit level, are remarkably similar.
2. The COHORT program appears to have had little or no impact on either leader-led stability or small unit integrity.
3. Unit Manning System emphasis has not directly addressed internal turbulence. (A recent initiative, however, may indicate that this will soon change. A Unit Manning Task Force is to be set up at FT Hood to design, analyze, and test company COHORT models. Internal turbulence criteria may be measured as part of that effort).
4. Monthly Unit Status Report does not account for transfers within the reporting unit (internal turbulence). Sorley's 1980 statement (pp. 77-78) is, woefully, still too true today: "The failure to integrate turbulence as a determining factor in the assessment of unit readiness is in my view the most serious shortcoming of the system. No one who ever commanded a troop unit, or even been a part of one, is oblivious to the large amount of time and energy required to assimilate and integrate new arrivals successfully into an existing team....Where the turnover involves leaders, as it typically has in the Army for a number of years, units are forced to expend enormous amounts of adaptive energy getting used to the style and emphasis of each in a constant stream of new commanders. And each new commander takes

time to become familiar with the unit's situation and personnel, and to devise his own approach to running it in a professional way, with inevitable loss of momentum and direction while that process takes place over and over again."

5. Gearing up for key events, such as NTC or ARTEP, appears to generate an increase in internal turbulence, a decrease in small unit integrity, and a decrease in leader-led stability. The intention of these key training events is being subverted; a different unit membership, as well as new leadership, applies the lessons supposedly learned by the original participants, who by then have been assigned elsewhere.

6. Army strength management is a product of Army culture. (And perhaps the reverse is also true; they are certainly interactive.) The culture must be changed, so that COHORT is no longer treated as an anomaly within an unsympathetic, individual-oriented personnel system. The concept of unit service, as well as individual equity, must be rewarded if expected to endure and to thrive.

CURRENT USR PERSONNEL MEASURES

The personnel portion of AR 220-1 (DA Form 2715) measures the following: assigned strength, available strength, available MOS trained percentage, available senior grade percentage, and personnel turnover percentage (at battalion level). The personnel portion of the USR, then, is focused NOT on any true concept of units, but on aggregations of individuals.

Currently, the USR does NOT measure small unit integrity or stability, leader-led stability, or any sense of unit cohesion or "bonding" among unit members. As a result, a unit's personnel problems can be "fixed" by infusing it with new faces the day before the Unit Status Report is due. This, indeed, is common practice, particularly at division and brigade level, in our combat units today. It is a practice that is rewarded by our current system for reporting personnel "status", rather than personnel readiness. (The 1986 version of AR 220-1 very carefully refers to the USR as "resource status" data, rather than any sort of readiness measure. However, the USR does provide "data as part of the Army Readiness Management System." (See page 3, AR 220-1).

PROPOSED NEW MEASURES

The goal is not necessarily to eliminate turbulence. Admittedly, the opposite of turbulence is stagnation, which would be neither achievable nor desirable. A far more reasonable goal is to be able to manage the level of turbulence.

Assess it -- know what it is.

Report it -- officially recognize that it exists and that it requires managing.

Commanders would then be required to assess the trade-off before internal reassignments are made. They would be required to recognize that there is a potential degradation of future combat effectiveness (COST) associated with a personnel change, even though there may be a payoff (BENEFIT) for the unit or the individual. It would then become a part of command responsibility to ask, "Is it worth the cost to make the change that is being considered?" Even an informal cost-benefit analysis cannot be accomplished unless the cost, including intangible factors such as cohesion and probable future unit combat performance, is recognized as a value to be weighed.

The logic is simple. To effect change, measure what needs to be changed: unit integrity/stability, as well as cohesion. To make change relevant to readiness, include such measures at least in the USR, if not in a more relevant report of personnel readiness. Add measures of leader-led stability and small unit integrity, as well as a measure of platoon cohesion. Make the Unit Status Report (USR) the readiness tool its designers originally intended it to be. Or replace it entirely with true measurement of unit readiness, to include meaningful indicators of personnel readiness for combat.

STRAWMAN MEASURES: Small Unit Integrity, Leader Stability

In order to develop strawman measures, relevant parameters must be established. What units are to be affected? Measured at what level? Over what time period? Are all members of reporting units involved? How is an "intact" small unit defined?

To begin with, not all Army units would be affected initially. Reporting would be limited to combat arms units only, such that only Infantry, Armor, and Artillery battalions would report stability data. At least two measures are required: one for small unit integrity (horizontal bonding implication), and one for leader-led stability (vertical bonding implication). For reporting purposes, the unit of measure would be the lowest echelon at which leadership is practiced and at which unit integrity is significant on the distributed battlefield, which is the squad, crew, or section level. For simplification of reporting, not all battalion membership would be measured. In the same spirit with which certain "pacing" items are reported as part of the equipment status portion of the USR, certain selected subunits would be treated as selective personnel "pacing" items. These reportable items would include only Infantry rifle squads, Armor tank crews, and Artillery gun sections. Hence, most headquarters elements such as supply and maintenance sections, would not be considered

reportable, at least initially.

A working definition of "intact" must be formulated, in order to report the percentage of intact squads, crews, or sections. For reporting purposes, an intact small unit could be defined as one which has maintained 75% of its membership and has had no change of leader during the reported time interval. For example, in a light Infantry squad with 9 squad members, 7 out of 9 would have to remain the same, with no change of squad leader. For Armor, in a tank crew of 4, 3 would have to be the same, with no change of tank commander. For Artillery, on an 8-man gun crew (as one example), at least 6 of the section members would be unchanged, to include the section chief in order to meet the criterion of "intact." Although the numbers may vary, the idea remains the same.

Table 5 illustrates various ways in which "Intact" may be defined.

A time interval would also need to be determined. The recommended time interval is nine months. Anything shorter is probably insufficient in terms of meaningful cohesion enhancement, and 12 months may not be achievable. In terms of current planning for package replacement (new unit replacement packets arriving either 3 or 4 times per year), a nine month "qualifying" period encourages the desired stability by requiring that small units remain intact through at least two package replacement periods. It makes it more likely that significant training events will have occurred, and above all, it encourages unit integrity on a sustained basis, rather than for a short reporting period. If a time interval of less than nine months is adopted, package replacement arrival may have the unintended consequence of encouraging rather than discouraging internal turbulence. These considerations are illustrated in Table 6.

Based on the parameters previously discussed, a general formula for measuring small unit integrity is shown in Table 7. A strawman measure for leader-led stability is shown in Table 8. All platoon and company level "Green-tab" leadership positions within the battalion would be included. Internal (within battalion) as well as external position changes would be counted against the reporting unit. The same time interval would be utilized as previously discussed. Nine months is recommended.

Table 4

DEVELOPING MEASURES OF SMALL UNIT INTEGRITY/STABILITY

ESTABLISH RELEVANT PARAMETERS:

- LIMIT MEASUREMENT TO COMBAT ARMS UNITS, INITIALLY
- AT LEAST TWO MEASURES ARE REQUIRED:
 - SMALL UNIT INTEGRITY (HORIZONTAL)
 - LEADER-LED STABILITY (VERTICAL)
- DETERMINE LOWEST ECHELON AT WHICH UNIT INTEGRITY/STABILITY MATTERS ON THE DISTRIBUTED BATTLEFIELD
- MEASURE ONLY SELECTIVE "PACING ITEMS"
 - INFANTRY RIFLE SQUADS
 - ARMOR TANK CREWS
 - ARTILLERY GUN SECTIONS
- DETERMINE MOST MEANINGFUL TIME INTERVAL
- DETERMINE RELEVANT C-RATING CRITERIA

Table 5

VARIOUS WAYS TO DEFINE "INTACT" SQUAD/CREW/SECTION

OPTIONS:

- 100% OF MEMBERS UNCHANGED
- 75% OF MEMBERS UNCHANGED, WITH NO CHANGE OF LEADER
- 75% OF MEMBERS UNCHANGED, WHETHER OR NOT THE LEADER CHANGES
- ONLY DESIGNATED KEY POSITIONS UNCHANGED

RECOMMENDATION:

- OPTION #2 (75 %, W/ NO LEADER CHANGE)

EXAMPLES OF OPTION #2:

- TANK CREW-- TC PLUS 2 OUT OF 3 OTHERS (3/4 - 75%)
- INF SQUAD-- SQD LDR PLUS 6 OUT OF 8 OTHERS (7/9 - 78%)
SQD LDR PLUS 7 OUT OF 9 OTHERS (8/11 - 77%)
- ARTY SECTION-- SECTION CHIEF PLUS 6 OUT OF 8 OTHERS (7/9 - 78%)

Table 6

APPROPRIATE TIME INTERVAL

- 90 DAYS
 - ENCOURAGES STABILITY OVER MORE THAN ONE REPORT PERIOD
 - SAME PERIOD NOW USED TO REPORT TURNOVER ON CURRENT USR
 - PERIOD TOO SHORT TO ENSURE PARTICIPATION IN LIVE-FIRE AND OTHER SIGNIFICANT TRAINING EVENTS
- 6 MONTHS
 - MORE LIKELY THAT SIGNIFICANT TRAINING EVENTS OCCUR
 - FOR ARMOR, FITS TANK GUNNERY CYCLE
 - MAY STILL BE INSUFFICIENT TIME PERIOD
- 9 MONTHS
 - REWARDS STABILITY OVER 2 REPLACEMENT PERIODS UNDER NEW UNIT REPLACEMENT CONCEPT (PACKAGE FILLS 3 TIMES PER YEAR)
 - ENCOURAGES UNIT INTEGRITY ON A SUSTAINED BASIS
- 12 MONTHS
 - MORE DIFFICULT TO ACHIEVE
 - ENCOURAGES MORE STABILITY, BUT MAY BE PROHIBITIVE

RECOMMENDATION: 9 MONTH STABILITY PERIOD FOR REPORT PURPOSES,
WITH C-RATINGS DETERMINED APPROPRIATELY

Table 7

A STRAWMAN MEASURE FOR LEADER STABILITY

- COUNT ALL PLATOON AND COMPANY LEVEL "GREEN-TAB" LEADERSHIP POSITIONS WITHIN THE BATTALION
- COUNT INTERNAL (WITHIN BATTALION) AS WELL AS EXTERNAL POSITION CHANGES
- USE SAME TIME INTERVAL AS USED FOR MEASURE OF SMALL UNIT INTEGRITY

FORMULA: $X - \frac{\# \text{ LEADERS IN POSITION FOR TIME SPECIFIED}}{\# \text{ LEADERS AUTHORIZED BY MTOE}} \times 100$

Table 8

A STRAWMAN MEASURE OF SMALL UNIT INTEGRITY

- USE GENERAL FORMULA AS SHOWN BELOW:

(INFANTRY BN)	$X - \frac{\# \text{ INF SQUADS INTACT FOR TIME SPECIFIED}}{\# \text{ INF SQUADS AUTHORIZED BY MTOE}} \quad X \ 100$
(ARMOR BN)	$X - \frac{\# \text{ TANK CREWS INTACT FOR TIME SPECIFIED}}{\# \text{ TANK CREWS AUTHORIZED BY MTOE}} \quad X \ 100$
(ARTILLERY BN)	$X - \frac{\# \text{ GUN SECTIONS INTACT FOR TIME SPECIFIED}}{\# \text{ GUN SECTIONS AUTHORIZED BY MTOE}} \quad X \ 100$
- COUNT INTERNAL (WITHIN BATTALION) AS WELL AS EXTERNAL POSITION CHANGES
- ESTABLISH TIME INTERVAL FOR MEASUREMENT
- ESTABLISH DEFINITION OF "INTACT " SQUADS/CREWS/SECTIONS

RECOMMENDATIONS AND CONCLUSIONS

1. Initiate action to include measures of small unit integrity/-stability as supplements to the USR now. Include a measure of cohesion, when it becomes available.

2. Support establishment of a joint DCSPER-DCSOPS task force, with ARI-WRAIR technical support, to develop and implement new USR measures or a new unit readiness report.

3. Establish a task force to propose approaches to the following actions:

- Publish manning levels in terms of primary combat groups rather than individual "fill" strength figures.

- Increase interface between units and the training base.

- Decentralize promotions, to reward unit service.

- Seek other opportunities to reward unit stability as well as individual equity. This may require changing the culture of Army personnel management. Otherwise, changes tend to be cosmetic and temporal.

4. Consider establishing a policy/research integration cell in order to achieve the following:

- Policy information acquisition and integration

- Human readiness

- Unit integrity

- Systematic policy recommendations rendered directly to DCSPER.

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